
Chapter 1

*Transportation In Indiana:
Multimodal Issues, Policies and Strategies
For The 1990's And Beyond*

Transportation In Indiana: Multimodal Issues, Policies and Strategies For The 1990's And Beyond

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Policy Plan Preface

Transportation In Indiana: Multimodal Issues, Policies and Strategies For The 1990's And Beyond, is a broad update of the long-range multimodal transportation policy plan for the State of Indiana. Indiana's first long-range multimodal transportation policy plan was developed by the Indiana Department of Transportation, Transportation Planning Division, and published in March 1992. Significant changes in national transportation policy brought about by congressional passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in December 1991 necessitated a refinement of Indiana's multimodal transportation policies and strategic priority directions.

This policy plan update, *Transportation In Indiana: Multimodal Issues, Policies and Strategies For The 1990's and Beyond*, is designed to:

- Identify issues of major importance to the users of Indiana's transportation system and to the Indiana Department of Transportation, particularly given passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in December 1991, and the subsequent promulgation of federal requirements and guidelines;
- Formulate multimodal policies and strategies that will place the Indiana Department of Transportation in a proactive position with regard to Indiana's future transportation challenges and opportunities, and;
- Serve as a broad policy guide for continued development of Indiana's multimodal transportation system over the next ten to twenty years.

The issues, policies and strategies outlined in this policy plan were developed over the past eight months by diverse issue-related working groups, including the Department's technical, professional, and management staff, other state agencies, constituent groups, and the general public. Their assistance in the development of this update is sincerely appreciated.

Many of the policies and strategies presented here are "in place" and support the programs currently underway in the Indiana Department of Transportation. With the careful review and assistance of our customers, the Department intends to continuously develop and articulate these issues, policies and strategies beyond the final publication of this document.

The updated long-range policy plan ultimately adopted by the state's policymakers will serve as strategic guidance for transportation system development by the State of Indiana and the Indiana Department of Transportation.

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Multimodal Issues, Policies and Strategies For The 1990's And Beyond

Transportation System Effectiveness

Transportation Safety

Demographic Changes And Quality of Life

Transportation Finance

Intergovernmental Coordination

Economic Development

Natural Environment and Energy

Bicycle And Pedestrian Facilities

New Technology

TRANSPORTATION SYSTEM EFFECTIVENESS

Policy Statement

INDOT will strive to develop an efficient and well-integrated multimodal transportation system. This will be pursued through cost-efficient and cost-effective management and maintenance of existing facilities and services, through appropriate expansion of capacity, and through removal of bureaucratic constraints to efficient and effective transportation of people, goods and freight.

Intermodal Strategies

- INDOT will develop a long-range multimodal transportation system plan that will identify the current condition of the system, forecast growth, and identify transportation system improvements that will meet travel demand and support economic growth.
- INDOT will develop a comprehensive set of planning tools that will allow for system-level analyses of the state transportation system. These tools will include a geographic transportation information system, multimodal travel demand forecasting capabilities, and methodologies to identify the economic impact of transportation investments.
- INDOT will develop an Intermodal Management System to better integrate and connect the various modes of transportation into a unified system.
- INDOT will develop, in coordination with the state's Metropolitan Planning Organizations, a Congestion Management System to alleviate congestion and enhance the mobility of people, goods and freight through the efficient use of the transportation system. Preference will be given to strategies that reduce single-occupant vehicle travel, especially in urban areas facing air quality non-attainment.

Aviation Strategies

- INDOT will support improved air carrier service to small communities and will work with local governments to assure that scheduled passenger service is maintained and extended to all communities where it is justified by demand.
- INDOT will work to maintain existing access and will support efforts to gain new small community access to large and medium air carrier hub airports.
- INDOT will support and implement local development programs that maximize the efficiency of the existing airport system, and which preserve

Public Transit Strategies

- INDOT supports the efforts of transit operators to increase their share of person-trips carried by providing more efficient and effective service. Transit service includes all forms of high-occupancy and non-motorized travel.
- INDOT will work with local public transit systems and will encourage solutions to achieve more efficient and effective services.
- INDOT will encourage better coordination of transit operations in regions where service overlaps and gaps exist.
- INDOT will develop a Public Transit Management System using performance analysis to identify needs and improve investment decision making.
- INDOT will encourage the expansion of specialized transportation services to better serve the general public.
- INDOT will encourage improved bicycle and pedestrian access to transit services.

Rail Strategies

- INDOT will examine all potential sources of revenue to encourage continued operation of the rail freight system serving customers in Indiana.
- INDOT will work with shippers and short line railroads to encourage the preservation of rail service.
- INDOT will coordinate safety improvements for both the railroad industry and the public along the existing rail freight network and at rail/highway intersections. Safety improvements include, but are not limited to, implementation of warning devices, improvement of track conditions, and closure of rail/highway intersections.
- INDOT will provide leadership in the railroad abandonment process. INDOT will lead the Abandoned Rail Corridor Advisory Group to establish recommendations for the future transportation uses of abandoned rail corridors. INDOT will work with the appropriate public or private agencies to develop and implement alternative uses for abandoned rail corridors.
- INDOT will identify corridors where the development of rail passenger service, including the development of high-speed passenger service is a good investment. INDOT will facilitate and work with the various established rail

passenger groups to create dialogue, examine options for implementation, and explore funding mechanisms.

- INDOT will continue to monitor and investigate improvements in rail technology, such as tiltable trains and railcars, magnetic levitation (MAGLEV) and other high-speed rail technologies, for their applicability to Indiana.

TRANSPORTATION SAFETY

Policy Statement

INDOT will work to ensure that safety is considered and implemented, as appropriate, in all phases of transportation planning, design, construction, maintenance, and operations. INDOT will strive to raise the safety awareness of both the transportation industry and users of transportation facilities. INDOT will work closely with other local, state, and federal agencies to improve information reporting on transportation crashes, exposure to risks, and trend analysis, in order to identify potential safety problems, analyze potential solutions and implement appropriate actions.

Strategies

- INDOT will act as the lead agency in the development and implementation of a Safety Management System, with the overall goal of reducing the number and severity of traffic crashes on all public roads in Indiana.
- INDOT will continually improve the highway crash analysis system in partnership with the Indiana State Police and the Bureau of Motor Vehicles to provide more reliable data for planning, programming and design decisions.
- INDOT will strive to reduce crashes at rail-highway grade crossings by recommending those projects with the highest return on investment regardless of jurisdictional boundaries, by using the Federal Railroad Administration crash prediction formula on a statewide basis, and by closing rail-highway crossings where feasible.
- INDOT will enforce the proper operation of railroad crossing warning devices.
- INDOT will identify and implement cost-effective actions to eliminate hazardous intersections and transportation segments.
- INDOT will design and construct transportation projects to accepted safety standards.
- INDOT will certify all public and private use airports, regulate the height and location of tall structures, regulate the use of noise sensitive land as it affects airports, and inspect all public use airports annually.
- INDOT will promote airport safety through inspections of airport pavement, supporting the need for an Automated Weather Observation System

- INDOT will promote airport safety through inspections of airport pavement, supporting the need for an Automated Weather Observation System Program, and implementing the Airport Obstruction Evaluation Program.
- INDOT will study and improve work site safety in construction and maintenance zones for INDOT and contractor employees, as well as the traveling public. INDOT will encourage the use of law enforcement patrols in work zones and other innovative efforts that promote safe vehicle speeds through work zones.
- INDOT will increase public awareness of transportation safety issues through promotional activities such as Operation Lifesaver.
- INDOT will perform bridge inspections to assure their safe load carrying capacity to identify maintenance or construction needs.
- INDOT will measure pavements with the purpose of eliminating pavement rutting, distress and slippery pavements.
- INDOT will maintain all traffic signs, signals, and pavement markings to promote the safety of the public.
- INDOT will minimize hazardous road conditions during times of inclement weather.
- INDOT will act to protect the motoring public by providing traffic control during times of emergency road closures.
- INDOT will emphasize research projects that promote engineering decisions based on safety studies.
- INDOT will require all employees who operate INDOT vehicles to have a national Commercial Drivers License or attend defensive driving educational courses.
- INDOT will consider the safety of non-motorized traffic in the design or redesign of routes with significant non-motorized use.

DEMOGRAPHIC CHANGES AND QUALITY OF LIFE

Policy Statement

INDOT is committed to develop a transportation system that responds to demographic change and contributes to the quality of life. INDOT will provide safe and efficient intermodal access to the diverse business, recreational, and cultural opportunities of Indiana.

Strategies

- INDOT will coordinate the development and use of a set of consensus socioeconomic forecasts, working with appropriate state agencies, to determine past, present, and emerging demographic changes that affect future demands on the state's transportation system.
- INDOT will identify and eliminate institutional barriers to the state's transportation system, whether it be for citizens with disabilities who are dependent upon specific motorized and non-motorized modes of transportation or commercial vehicles that need to travel efficiently across many states.
- INDOT will continue to improve the aesthetics of its facilities, roads and bridges and will minimize adverse impacts on environmentally sensitive areas.
- INDOT will continue and expand upon its customer focus, providing high quality service and reduction in user costs for each dollar spent on Indiana's transportation system.
- INDOT will work closely with the Department of Commerce and the Department of Natural Resources to foster the development of recreational and cultural assets, and to capture and capitalize upon Indiana's unique tourism opportunities.
- INDOT will encourage appropriate accommodations for bicycle, pedestrian and other non-motorized recreational travel as a means to expand the overall quality of life for Hoosiers.

TRANSPORTATION FINANCE

Policy Statement

INDOT supports adequate and reliable funding for Indiana's transportation system from all sources: federal, state, and local governments; and the private sector.

Strategies

- INDOT will work with Indiana's Congressional delegation to increase Indiana's federal funding for transportation.
- INDOT will provide the Indiana State Legislature the information necessary to assess statewide transportation funding needs.
- INDOT will encourage and support efforts by cities, towns, and counties to increase local sources of transportation funding to meet local needs.
- INDOT will, independently and in conjunction with other state agencies and local jurisdictions, solicit private sector funding for transportation investment whenever feasible.
- INDOT will take whatever actions are necessary, within its power, to ensure that Indiana's federal transportation funding resources do not lapse or are not lost due to sanctions.
- INDOT will continue to pursue efficiency improvements and cost savings in its operations in order to maximize the funds available for preserving and improving Indiana's transportation infrastructure.
- INDOT will consider specific project return on investment analyses in the utilization of transportation funds.
- INDOT will provide funding for creative, intermodal transportation solutions whenever appropriate and feasible.
- INDOT will refine transportation funding allocation criteria to more closely align distributions with relative needs.
- INDOT will simplify the application process for all transportation funding to improve local government access to these resources.

INTERGOVERNMENTAL COORDINATION

Policy Statement

INDOT will actively solicit greater coordination and cooperation with other agencies, units of government and other stakeholders with the goal of developing a state transportation plan that will guide the selection of investments that offer the best value while providing support for Indiana's continued economic growth.

Strategies

- INDOT will continually communicate with elected officials, local governments and the public on upcoming transportation improvements in their areas. INDOT will communicate project timetables and nature of work directly to the media prior to a project's onset, so that the public and the transportation community will be informed.
- INDOT will provide all necessary information to local governments such that they are able to use federal funds successfully to upgrade the quality of their transportation systems. INDOT will provide technical expertise in project planning, project development, and construction and will strive continually to simplify the federal-aid process for transportation.
- INDOT will continually improve the transportation planning process to assure that it is consistent with federal regulations, identifies those transportation investments that have the greatest impact on system performance at the lowest possible cost, and minimizes environmental and social impacts on communities. INDOT will work closely with the state's Metropolitan Planning Organizations (MPOs) during the planning process to assure system connectivity and to acknowledge the MPO's role in transportation planning for their urbanized areas.
- INDOT will establish intergovernmental committees to promote and coordinate the use of appropriate management systems at local levels of government as an aid in developing transportation plans. INDOT will provide guidelines, support, and education for the development and continued use of the systems at the local level.
- INDOT will work with local units of government, MPOs and other stakeholders to assure that the planning process for transportation and land use protects the functional integrity and financial investment of Indiana's highways through an active access management process.

- INDOT will continue working with Indiana counties and small urban areas to establish management systems and other planning tools that will serve as guidance for transportation investment decisions on the local level.
- INDOT will select and develop projects consistent with the state's goals to protect and improve the natural environment. INDOT will consider the Indiana Department of Natural Resources (IDNR) programs for natural and historic lands and soil conservation, the Indiana Department of Environmental Management (IDEM) plans for environmental cleanup and clean water, the state's waterway and coastal zone management plans, and the state implementation plan for air quality, in planning the transportation system.

ECONOMIC DEVELOPMENT

Policy Statement

INDOT has a unique role in sustaining and fostering Indiana's economy and recognizes that policy decisions and transportation infrastructure investments have major effects on economic growth and development. To support economic competitiveness, INDOT will improve upon Indiana's high quality transportation system to reduce the cost of moving people, goods and freight, connect Indiana with regional, national, and international markets, provide communities with an edge in competing for jobs and business locations, and connect people with economic opportunities.

Strategies

- INDOT will develop a transportation investment model and an economic impact model in association with the Indiana Department of Commerce and the Indiana Economic Development Council to provide estimates of transportation induced regional employment, income benefits, and changes in economic activity.
- INDOT will work with state and local economic development groups to plan and coordinate transportation and land use to meet state and local economic goals.
- INDOT will work with state and local economic development groups to promote the competitive advantages that Indiana's economy has over other areas of the nation. INDOT will identify infrastructure investments that enhance the value of Indiana's products and services, improve market accessibility, improve productivity, and support community development.
- INDOT will support efforts of Indiana's international airports and international ports to secure greater direct access to the global travel and trading environment. INDOT will coordinate this effort with state and local economic development groups to best support the production and service industries of Indiana that require international export and import accessibility.
- INDOT will actively promote opportunities for disadvantaged business enterprises.
- INDOT will support Indiana businesses.

- INDOT will encourage local entities to consider transit, pedestrian, bicycle, and other non-motorized transportation in land use and transportation planning.
- INDOT will identify and work in partnership with Indiana transportation system users to strengthen intermodal transportation connections for people, goods, and freight to intrastate, interstate, and international markets.
- INDOT will encourage the development and preservation of the existing rail freight network in Indiana. INDOT will seek to expand rail freight service in areas where corridors currently exist, where trackage is available for freight service, and demand for service justifies new investment.
- INDOT will encourage active local efforts to attract development that will improve local economies and the overall economy of the state. INDOT will make major transportation investments for purposes of economic development in concert with demonstrated local efforts.

NATURAL ENVIRONMENT AND ENERGY

Policy Statement

INDOT will establish and maintain a transportation system that is consistent with the state's commitment to protect the environment. INDOT will contribute to energy conservation efforts by promoting efficiency in all modes of travel and by encouraging the most efficient use of transportation systems.

Strategies

- INDOT will plan, design, develop, construct and maintain transportation facilities to ensure minimal impacts on the environment from noise, air and water pollution. INDOT will minimize disruption of environmentally sensitive areas, communities and aesthetics.
- INDOT will promote the wise use of energy while meeting the long range needs of the state's transportation system.
- INDOT will monitor changes in federal and state regulations and statutes, including the *State Implementation Plan*, to adjust the department's operations as needed for compliance. INDOT will influence proposed changes in these statutes and regulations when it benefits the objectives of the state transportation planning process.
- INDOT will use the best techniques to minimize environmental damage and loss at departmental facilities and worksites.
- INDOT will support public education programs to increase environmental awareness and energy conservation.
- INDOT will improve the environmental compatibility of its facilities, roads, and bridges through landscape planning and erosion control. Indigenous materials such as prairie plantings, wildflowers, and native trees, will be used wherever possible, if such materials meet the needs of the project and are not cost prohibitive.
- INDOT will endorse the use of public transportation, improved intermodal connections, and traffic demand management techniques to promote efficient use of state transportation resources and facilities.

- INDOT will support ridesharing activities and vanpool programs for state employees in order to achieve more efficient use of state transportation facilities.
- INDOT will emphasize the use of recyclable materials in construction projects and at our facilities, once these materials have been proven to be environmentally beneficial and structurally appropriate.
- INDOT will plan, develop and construct transportation projects that comply with the Clean Air Act Amendments (CAAA) and meet the air quality emissions budget.
- INDOT will solicit input from other agencies when assessing the environmental impacts of transportation investment decisions.

BICYCLE AND PEDESTRIAN FACILITIES

Policy Statement

INDOT will support non-motorized modes of travel as a means to increase system efficiency of the existing surface transportation network, reduce congestion, improve air quality, conserve fuel and promote tourism benefits. INDOT will work to remove unnecessary barriers to pedestrian and bicycle travel.

Strategies

- INDOT will support local efforts to establish or enhance bikeway and pedestrian facilities by continuing to actively participate in local and regional facility planning.
- Through INDOT's administration of the Transportation Enhancement Activities (TEA) program, INDOT will participate in the right-of-way acquisition of abandoned rail corridors as supported by local governments and the Department of Natural Resource's *Indiana Trails 2000 Plan*.
- INDOT will adopt pedestrian and bicycle standards to be applied to projects during their planning phase and retrofit to projects in design where possible. The standards will be made available to local public agencies and Metropolitan Planning Organizations.
- INDOT will consider bicycle and pedestrian needs in all transportation projects. Items such as lane width, pavement surfaces, sidewalk location and pedestrian crossings will be considered. Current transportation actions will not preclude future consideration of pedestrian and bicycle needs.
- INDOT will support increased accommodation of bicyclists and pedestrians at public transportation, air and rail facilities.
- INDOT will encourage new land use and urban design strategies that incorporate opportunities for pedestrian and bicycle movements. INDOT will also encourage continuous facility accommodations for bicycles and pedestrians.
- INDOT will accommodate horse-drawn vehicles in areas of the state where those forms of transportation are common.

NEW TECHNOLOGY

Policy Statement

INDOT will provide leadership for the State of Indiana to develop and deploy advanced transportation technologies. INDOT will embrace a broad-based, comprehensive research program to support all elements of intermodal transportation.

Strategies

- INDOT will continue to invest in basic and applied research and development through its transportation programs. The initiative to involve all major state universities and industry through partnering in research and development will be continued and expanded. The effort to improve technology transfer methods will include the development of a formal departmental technology assessment and distribution process. The initiative of Federal Highway Administration, INDOT, the Highway Extension and Research Project for Indiana Counties and Cities (HERPICC), and the Rural Transit Assistance Program to improve the process for technology transfer is encouraged.
- INDOT will develop an agency-wide database system of detailed and dynamic information on all modes of transportation within Indiana. The information will be shared, supported, and accessible in simple formats by all divisions of INDOT. INDOT will explore methods to develop a resource of shared information among state and local agencies.
- INDOT will continually develop improved methods to communicate and to share information electronically among public and private organizations. This information might include construction data, traffic statistics, agency bulletins, or research information.
- INDOT will continue to incorporate innovative technologies and techniques, such as those identified in the *Indiana Policy on the Quality of Highways* and those implemented to optimize our operating procedures, in order to reduce our construction and maintenance costs.
- INDOT will aggressively pursue the implementation of intelligent vehicle highway system technologies to meet transportation demand and satisfy user needs in Indiana. Implementation of these technologies will reduce operating costs, save energy, reduce pollution, offer cost-effective alternatives to additional highway capacity, and provide better information and a more

reliable transportation system to motorists, transit riders, and commercial vehicle operators.

- INDOT will promote the development of new transportation technologies including those developed by Indiana-based enterprises.

Response to Comments On The INDOT Draft Policy Plan

During and following INDOT's statewide public meetings in August and September, 1994, INDOT received approximately thirty (30) sets of comments on the draft policy plan *Transportation In Indiana: Multimodal Issues, Policies and Strategies For The 1990's and Beyond* and the public involvement strategies. This section addresses the general themes that were raised in the comments on the policy plan. Specific questions that were asked will be answered individually, by the transportation planning staff, under separate cover. Comments on the public involvement strategies will be answered separately by INDOT's Division of Public Affairs. The comments are extremely helpful. The Indiana Department of Transportation appreciates the time you spent to share them with us.

INDOT was asked to develop an implementation plan and timeline for each of the policy statements. Although the implementation of some policies requires INDOT to undertake a new set of activities, most of the policies will be reflected in the department's management of the planning, project selection, and project development process. The transportation planning process as described in *Transportation In Indiana: Multimodal Plan Development For The 1990's And Beyond* is INDOT's implementation of the Policy Plan.

Several strategy statements were also changed to clarify INDOT's position regarding the department's responsibility to meet demand, provide mobility, while potentially limiting new capacity for the single-occupancy vehicle. All new projects, whether transit, passenger rail, highway, or non-motorized transportation, will be evaluated based on their contribution to measurable goals as compared with their immediate and long-term costs.

Comments received regarding INDOT's environmental policy ranged from those who felt INDOT's policy was too restrictive to those who felt it was not strict enough. Some clarifications were made to the strategy statements. Overall, INDOT is comfortable with the balance achieved in the policy document. INDOT will continue first to avoid, then to minimize environmental impacts while making cost effective project development decisions.

Strategy statements were changed to highlight the dependency of transit opportunities on the design of land use. The relationship between transit and non-motorized forms of transportation was also clarified.

INDOT agrees that the transportation system should not just support the state's economy, but help the growth of the economy. The language of the policy document has been changed to reflect this agreement.

A strategy statement has been added supporting a ridesharing program for state employees. INDOT appreciates the information received on existing ridesharing programs in which the department's employees might participate.